

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of)	
)	
PUBLIC UTILITIES COMMISSION)	DOCKET NO. 2008-0273
)	
Instituting a Proceeding to Investigate)	
the Implementation of Feed-in Tariffs)	
_____)	

**COMMENTS OF ZERO EMISSIONS LEASING LLC
ON HAWAIIAN ELECTRIC COMPANIES' PROPOSED RELIABILITY
STANDARDS WORKING GROUP**

**AND
CERTIFICATE OF SERVICE**

ERIK W. KVAM
Chief Executive Officer
Zero Emissions Leasing LLC
2800 Woodlawn Drive, Suite 131
Honolulu, Hawaii 96822
Telephone: (808) 371-1475

PUBLIC UTILITIES
COMMISSION

2010 MAR 15 P 2:36

FILED

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of)	
)	
PUBLIC UTILITIES COMMISSION)	DOCKET NO. 2008-0273
)	
Instituting a Proceeding to Investigate)	
the Implementation of Feed-in Tariffs)	
_____)	

**COMMENTS OF ZERO EMISSIONS LEASING LLC
ON HAWAIIAN ELECTRIC COMPANIES' PROPOSED
RELIABILITY STANDARDS WORKING GROUP**

ZERO EMISSIONS LEASING LLC ("Zero Emissions") respectfully submits the following comments on the proposal by Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO") and Maui Electric Company, Limited ("MECO") (HECO, HELCO and MECO collectively, the "Hawaiian Electric Companies") to convene a Reliability Standards Working Group in the above-referenced proceeding:

I. OVERVIEW

In its Decision and Order filed September 25, 2009 (the "D&O"), the Commission stated that feed-in tariffs ("FITs") "were a possible mechanism 'to dramatically accelerate the addition of renewable energy from new sources' and to 'encourage increased development of alternative energy projects'." *D&O* at 13. The Commission said that it "will direct the HECO Companies to adopt FITs in their respective service territories ... consistent with the principles described below." *D&O* at 17. Those

principles included a requirement that the HECO Companies “adopt standards that establish when additional renewable energy can or cannot be added on an island or region therein without markedly increasing curtailment, either for existing or new renewable projects. FIT generation should meet new load requirements and **displace fossil fuel generation ...**” [emphasis added] *D&O* at 50-51.

The National Renewable Energy Laboratory¹ has defined a “Feed-in Tariff (FIT)” as:

A renewable energy policy that typically offers a **guarantee of:**

1. **Payments** to project owners for total kWh of renewable electricity produced
2. **Access to the grid;** and
3. **Stable, long-term contracts (15-20 years)** [emphasis in original]

Feed-in tariffs (“FITs”) accelerate the addition of renewable energy from new sources and encourage increased development of alternative energy projects by obliging the utility to interconnect such projects (*i.e.*, a guarantee of access to the grid, provided the utility’s reliability requirements are met), and by obliging the utility to purchase such renewable energy at a fixed long-term rate (*i.e.*, a guarantee of payments to project owners for total kWh of renewable electricity produced). FITs encourage accelerated development of renewable energy projects because these utility obligations give project developers the revenue certainty that they need to obtain financing for their projects.

FITs create revenue certainty by creating price certainty and quantity certainty. FITs create price certainty by specifying a fixed long-term rate at which the utility is obliged to purchase renewable energy. FITs create quantity certainty by obliging the

utility to interconnect the renewable energy project (provided reliability requirements such as Rule 14H are met) for delivery of renewable energy to the utility, and by obliging the utility to purchase quantities of renewable energy generated by the project.

In creating a utility obligation under a FIT to interconnect as-available (intermittent) renewable energy generation (such as in-line hydropower, concentrating solar power, photovoltaic solar power and onshore windpower) to the utility's electric system, the Commission needs to know how much as-available renewable energy *could* be added to the grid of each island without compromising the reliability of the utility's electric system. The amount of as-available renewable energy that *could* be added to the grid of each island without compromising electric system reliability will depend on the regulating capacity of the utility's must-run and dispatchable *non*-renewable (i.e., fossil fuel) generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation.

In creating a utility obligation to purchase as-available renewable energy, the Commission needs to know: Of the amount of as-available renewable energy that *could* be added to the grid of each island without compromising electric system reliability, how much of that amount *should* be added to the grid based on *economic* considerations? The amount of as-available renewable energy that *should* be added to the grid will depend on the economic costs and benefits of the added as-available renewable energy relative to any dispatchable non-renewable energy displaced by the added as-available renewable energy.

¹ Karlynn Cory, "Renewable Energy Feed-in Tariffs: Lessons Learned from the U.S. and Abroad (National Renewable Energy Laboratory, November 18, 2009), accessed at http://www.cleanenergystates.org/Meetings/RPS_Summit_09/Cory_RPS_Summit2009.pdf.

To determine a proper cap on the amount of as-available renewable energy that the utility should be obliged to purchase under a FIT, the Commission needs answers to the following two questions:

Question 1: How much as-available renewable energy *could* be added to the grid of each island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation?

Question 2: How much of the as-available renewable energy that could be added to the grid of each island without compromising electric system reliability *should* the utility be obliged to purchase based on the relative costs and benefits of the added as-available renewable energy and any dispatchable non-renewable energy displaced by the added as-available renewable energy?

Because the answer to Question 2 depends on the answer to Question 1, the Commission needs an answer to Question 1 to determine a proper cap on the amount of as-available renewable energy that the utility should be obliged to purchase under a FIT. Without an answer to Question 1, any cap on the amount of such as-available renewable energy, such as the Commission's initial cap equal to 5% of 2008 peak demand (*D&O* at 55), will be based on a guess by the Commission as to the amount of as-available renewable energy that could be added to the grid of each island without compromising electric system reliability. Without an answer to Question 1, the effective cap on the amount of such as-available renewable energy will be zero because the Commission

cannot be sure that *any* addition of as-available renewable energy will not compromise the reliability of the utility's electric system.

The Commission recognized early on that an answer to Question 1 was necessary for the Commission to make an informed determination of how much as-available renewable energy the utility should be obliged to purchase under a FIT. In PUC-IR-1, the Commission asked the Hawaiian Electric Companies:

For each island, with the current levels of demand, transmission, and supply resources, what is the maximum amount of total and additional intermittent resources that can be accommodated without compromising reliability?

The Commission characterized the Hawaiian Electric Companies' response to PUC-IR-1 as follows (*D&O* at 49):

Citing the multiplicity of factors incorporated into reliability determinations, the HECO Companies declined at the panel hearing and in their submissions to define how much renewable energy each island could incorporate.

As a result of the Hawaiian Electric Companies' refusal to answer Question 1 (as put to the Hawaiian Electric Companies in the form of PUC-IR-1), the Commission set an initial cap, on the amount of as-available renewable energy that the utility would be obliged to purchase under a FIT (*D&O* at 55), based on a guess that as-available renewable energy in an amount equal to 5% of 2008 peak system demand *could* be added to the grid of each island without compromising electric system reliability. In directing the Hawaiian Electric Companies

to develop reliability standards for each company, which should define most circumstances in which FIT projects can or cannot be incorporated on each island. ... The standards should complement existing standards, including those in the HECO Companies' tariff Rule 14, and should provide greater predictability with respect to reliability issues for developers. ... (*D&O* at 50)

and in directing the Hawaiian Electric Companies

to adopt standards that establish when additional renewable energy can or cannot be added on an island or region therein without markedly increasing curtailment, either for existing or new renewable projects. FIT generation should meet new load requirements and **displace fossil fuel generation ...**” [emphasis added] (*D&O* at 50-51):

the Commission implicitly acknowledged that the initial 5% system cap was based on a guess, and deferred, until the “Reliability Standard” phase of the proceeding, the obtaining of answers to Question 1 and Question 2 to determine a proper cap on the amount of as-available renewable energy that the utility should be obliged to purchase under a FIT.

To give effect to the Commission’s directions at pp. 50-51 of the *D&O*, as those directions relate to the determination of a proper cap on the amount of as-available renewable energy that the utility should be obliged to purchase under a FIT, Clean Energy Maui LLC (“CEM”) and Zero Emissions Leasing LLC (“ZEL”) proposed “Renewable Energy Generating Facility Reliability Standards,” at Appendix III to the CEM/ZEL Schedule FIT, having two parts: “Technical Requirements for Interconnection” and “Reliability Standard for Curtailment.”

The CEM/ZEL “Technical Requirements for Interconnection” re-iterate the Hawaiian Electric Companies’ own technical requirements for interconnection of distributed generating facilities in Rule 14H. The CEM/ZEL “Technical Requirements for Interconnection” have the same purpose as the technical requirements under Rule 14H: “To maintain the reliability of the utility system for all utility customers.” Zero Emissions believes that the CEM/ZEL “Technical Requirements for Interconnection,” like the Hawaiian Electric Companies’ own reliability standards in Rule 14H, provide an adequate technical basis for determining whether the addition of a given amount of as-

available renewable energy to the grid of each island would compromise the reliability of the utility electric system, for purposes of answering Question 1.

The purpose of the CEM/ZEL Reliability Standard for Curtailment is to specify a cap on the amount of as-available renewable energy that the utility *should* be obliged to purchase under a FIT, based on the utility's answer to Question 1, *i.e.*, how much as-available renewable energy *could* be added to the grid of each island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation.

To "fill-in-the-blanks" of the CEM/ZEL Reliability Standard for Curtailment, and find out how much as-available renewable energy *could* be added to the grid of each island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation, Zero Emissions submitted ZE-IR-107 to the Hawaiian Electric Companies.

As with PUC-IR-1, the Hawaiian Electric Companies declined, in their responses to ZE-IR-107, to define how much renewable energy each island could incorporate. The HECO and the HELCO responses to ZE-IR-107(c) contain no kilowatt-hour figures at all. The MECO response to ZE-IR-107(c) contains no kilowatt-hour figures for potential curtailment of non-renewable energy generating facilities, and contains no kilowatt-hour figures for actual curtailment of renewable or non-renewable energy generating facilities.

The Hawaiian Electric Companies' responses to ZE-IR-107(d) contain no kilowatt-hour figures at all.

As a result of the Hawaiian Electric Companies' refusal to answer Question 1 (as posed to the Hawaiian Electric Companies in the form of ZE-IR-107), Zero Emissions moved to compel the Hawaiian Electric Companies to provide responses to ZE-IR-107(c) and ZE-IR-107(d) in *Motion of Zero Emissions Leasing LLC to Compel Hawaiian Electric Companies to Provide Responses to Information Request*, filed March 8, 2010 (the "Motion to Compel"). In its *Memorandum* in support of the Motion to Compel, Zero Emissions argued:

The Hawaiian Electric Companies' excuses for not providing the requested kilowatt-hour figures do not wash. The Hawaiian Electric Companies know or can reasonably estimate the kilowatt-hours of reduced generation from their dispatchable non-renewable generation when they cycle that generation up and down during a typical 24-hour load cycle. The Hawaiian Electric Companies know or can reasonably estimate how many kilowatt-hours they currently are receiving from as-available renewable generation during a typical 24-hour load cycle, how many hours that as-available renewable generation is being curtailed during a typical 24-hour load cycle, and how many kilowatt-hours of electricity from as-available renewable generation are currently being curtailed during a typical 24-hour load cycle. The Hawaiian Electric Companies know or can reasonably estimate capacity factors of as-available renewable energy generation for displacing dispatchable non-renewable generation with as-available renewable generation. The Hawaiian Electric Companies know the regulating capacity of their must-run and dispatchable non-renewable generation. The Hawaiian Electric Companies can reasonably estimate how much as-available renewable energy *could* be added to the grid of each island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation.

Zero Emissions believes that the Hawaiian Electric Companies do not want to answer ZE-IR-107(c) and (d) because they do not want to admit that there is a positive, substantial and reasonably ascertainable amount of as-available renewable energy that *could* be added to the grid of each island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account

any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation.

II. ZERO EMISSIONS OPPOSES CONVENING OF A RELIABILITY STANDARDS WORKING GROUP.

Instead of answering Question 1 (as put to the Hawaiian Electric Companies in the forms of PUC-IR-101 and ZE-IR-107), the Hawaiian Electric Companies have proposed creation of a "Reliability Standards Working Group," redundant to the utilities' Integrated Resource Planning/Clean Energy Scenario Planning processes, in which the FIT docket intervenors would have no procedural rights to obtain answers to Question 1 from the Hawaiian Electric Companies, and in which the Hawaiian Electric Companies would never have to answer Question 1. Zero Emissions views the Reliability Standards Working Group proposal as a stratagem by the Hawaiian Electric Companies to avoid answering Question 1 and so avoid adoption of a genuine feed-in tariff, like the proposed CEM/ZEL Schedule FIT, that might displace some of the utilities' non-renewable dispatchable generation with as-available renewable generation.

An answer to Question 1 (as put to the Hawaiian Electric Companies in the form of ZE-IR-107) is needed as a first step to determining how much as-available renewable energy the utilities *should* be obliged to purchase under a FIT. A truthful answer to Question 1 (as put to the Hawaiian Electric Companies in the form of ZE-IR-107) would make unnecessary a Reliability Standards Working Group in this docket.

The Hawaiian Electric Companies' proposal to convene a Reliability Standards Working Group rests on the following assertions, contained in Attachment 4 to the *HECO Companies Report on Reliability Standards* ("HECO RS Att. 4"):

There is a potential reliability risk operating near minimum output on dispatchable units. The minimum dispatchable output for each dispatchable unit is determined by the lowest level of stable operation on the generating unit. Operating below this level can result in the unit tripping offline or cause deviations from environmental permit requirements. When all units are near the minimum output, the system is vulnerable to failure for loss-of-load events. The ability of the units to back down for high frequency excursions is limited and the units may be driven offline. The present regulating reserve down requirement has been set at the minimum regulating reserve down for the single contingency loss of load during minimum load (off-peak) conditions. Loss of more than this amount (6 MW on the MECO system, 9 MW on the HELCO system) can drive the responsive units (through their droop response) to below their stable operating point and risk loss of the units, or prolonged high-frequency excursions which may cause trips of other generation and cascading outages. The potential loss of load is larger during daytime conditions ... (*HECO RS Att. 4* at 6)

...during high variable output, in the absence of significant load growth the HELCO system cannot accommodate all future and existing RE even if all dispatchable conventional generation operates nearly twenty four hours at near minimum output. As mentioned above, operating in that manner ... may not be prudent due to potential reliability implications. (*HECO RS Att. 4* at 8)

... Similar to HELCO, absent significant load growth, MECO cannot accommodate all the existing or future renewable generation even with conventional generation backed down to minimum (plus down reserve) 24 hours a day. (*HECO RS Att. 4* at 9).

The HELCO system will operate under extended periods with a minimal amount of dispatchable generation online. This will have an effect on ... the response capabilities for frequency control. MECO has similar concerns and must make additional decisions regarding minimum conventional generation, to cover for variability, as unlike HELCO the renewable energy additions are all variable. (*HECO RS Att. 4* at 16)

Each of these assertions falsely and misleadingly assumes or implies that the utility would choose or be obliged to reduce the utility's entire dispatchable non-renewable generation to its "minimum" level, and thus minimize the regulating capacity available from such dispatchable non-renewable generation, at the same time that as-available renewable energy is added to the grid. Zero Emissions believes that a truthful answer to Question 1 (as put to the Hawaiian Electric Companies in the form of ZE-IR-

107) would show that there is some amount of as-available renewable energy that could be added to the grid of each island, and some amount of dispatchable non-renewable energy that could be displaced by such added as-available renewable energy, without compromising electric system reliability and without the need to convene a Reliability Standards Working Group to determine those amounts.

If the Hawaiian Electric Companies continue to refuse to answer Question 1, the Commission should charge a qualified independent expert entity, such as National Renewable Energy Laboratory, with the task of answering Question 1, and should give broad powers to that qualified independent expert entity, to compel the disclosure from Hawaiian Electric Companies of information needed to answer Question 1. Convening a “Reliability Standards Working Group,” in which the FIT docket intervenors would have no power to compel the disclosure of such information from the Hawaiian Electric Companies, would ensure that Question 1 never gets answered, and would ensure that the Commission would forever lack the information needed to create a feed-in tariff that obliges the utility to purchase as-available renewable energy up to an amount that does not compromise electric system reliability.

III. ZERO EMISSIONS SUPPORTS OPENING OF A NEW DOCKET TO ESTABLISH FORMAL BULK ELECTRIC SYSTEM RELIABILITY STANDARDS GOVERNING THE HAWAIIAN ELECTRIC COMPANIES’ ELECTRIC SYSTEMS.

In its filing submitted on February 8, 2010, Blue Planet Foundation proposed formal bulk electric system reliability standards governing the Hawaiian Electric Companies’ electric systems (“Hawaii NERC RS”) that would be (i) equivalent to the formal bulk electric system reliability standards (“NERC RS”) administered by the North American Electric Reliability Corporation (“NERC”), (ii) developed in the future

pursuant to a future stakeholder-driven process, overseen by an independent entity, and (iii) upon completion, administered by an independent entity, such as a Hawaii Independent System Operator (“HISO”). The NERC RS can be found on-line at http://www.nerc.com/files/Reliability_Standards_Complete_Set_2010Jan25.pdf where they run 1074 pages.

Zero Emissions joins in and supports adoption of a Hawaii NERC RS based on NERC RS. Zero Emissions believes, however, that adoption of a set of reliability standards running to 1074 pages and governing interconnection of all generating facilities to the electric systems of the Hawaiian Electric Companies is a task that is likely to take at least 2 years and justifies the opening of a separate investigatory docket by the Commission.

Zero Emissions believes that it is not necessary to wait 2 years or more for the implementation of reliability standards based on NERC RS before getting an answer to Question 1 and so proceeding with implementation of a genuine feed-in tariff, such as the CEM/ZEL proposed Schedule FIT, that obliges the Hawaiian Electric Companies to purchase as-available renewable energy up to an amount that does not compromise electric system reliability. The Hawaiian Electric Companies’ own reliability standards in Rule 14H provide an adequate technical basis for determining whether the addition of a given amount of as-available renewable energy to the grid of each island would compromise the reliability of the utility electric system, for purposes of answering Question 1. The Hawaiian Electric Companies know enough about the regulating capacity of their own must-run and dispatchable non-renewable generation to reasonably estimate how much as-available renewable energy *could* be added to the grid of each

island without compromising electric system reliability based on the regulating capacity of the utility's must-run and dispatchable non-renewable generation, taking into account any displacement of the utility's dispatchable non-renewable generation by the added as-available renewable energy generation.

* * * *

DATED: Honolulu, Hawaii, March 15, 2010

A handwritten signature in black ink, appearing to read "Erik Kvam", written over a horizontal line.

Erik Kvam
Chief Executive Officer
Zero Emissions Leasing LLC

CERTIFICATE OF SERVICE

I hereby certify that I have this date filed and served the original and eight copies of the foregoing **COMMENTS OF ZERO EMISSIONS LEASING LLC ON HAWAIIAN ELECTRIC COMPANIES' PROPOSED RELIABILITY STANDARDS WORKING GROUP** in Docket No. 2008-0273, by hand delivery to the Commission at the following address:

CARLITO CALIBOSO
PUBLIC UTILITIES COMMISSION
465 S. King Street, Suite 103
Honolulu, HI 96813

I further certify that copies of the foregoing **COMMENTS OF ZERO EMISSIONS LEASING LLC ON HAWAIIAN ELECTRIC COMPANIES' PROPOSED RELIABILITY STANDARDS WORKING GROUP** have been served upon the following parties and participants by causing copies hereof to be hand delivered, mailed by first class mail or electronically transmitted to each such party as follows:

DEAN NISHINA
EXECUTIVE DIRECTOR
DEPARTMENT OF COMMERCE
AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P.O. Box 541
Honolulu, HI 96809

2 copies
Via Hand Delivery

DARCY L. ENDO-MOTO
VICE PRESIDENT
GOVERNMENT & COMMUNITY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001

Electronically Transmitted

DEAN MATSUURA
DIRECTOR, REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001

Electronically Transmitted

JAY IGNACIO
PRESIDENT
HAWAII ELECTRIC LIGHT COMPANY, INC.
P.O. Box 1027
Hilo, HI 96721-1027

Electronically Transmitted

EDWARD L. REINHARDT
PRESIDENT
MAUI ELECTRIC COMPANY, LIMITED
P.O. Box 398
Kahului, HI 96733-6898

Electronically Transmitted

ROD S. AOKI, ESQ.
ALCANTAR & KAHL LLP
120 Montgomery Street, Suite 2200
San Francisco, CA 94104

Electronically Transmitted

Counsel for HECO Companies

THOMAS W. WILLIAMS, JR., ESQ.
PETER Y. KIKUTA, ESQ.
DAMON L. SCHMIDT, ESQ.
GOODSILL ANDERSON QUINN & STIFEL
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, HI 96813

Electronically Transmitted

Counsel for HECO Companies

THEODORE PECK
DEPARTMENT OF BUSINESS, ECONOMIC
DEVELOPMENT AND TOURISM
State Office Tower
235 South Beretania Street, Room 500
Honolulu, HI 96813

Electronically Transmitted

ESTRELLA SEESE
DEPARTMENT OF BUSINESS, ECONOMIC
DEVELOPMENT AND TOURISM
State Office Tower
235 South Beretania Street, Room 502
Honolulu, HI 96813

Electronically Transmitted

MARK J. BENNETT, ESQ.
DEBORAH DAY EMERSON, ESQ.

Electronically Transmitted

GREGG J. KINKLEY, ESQ.
DEPARTMENT OF THE ATTORNEY GENERAL
425 Queen Street
Honolulu, HI 96813

Counsel for DEPARTMENT OF BUSINESS, ECONOMIC
DEVELOPMENT AND TOURISM

CARRIE K.S. OKINAGA, ESQ.
GORDON D. NELSON, ESQ.
DEPARTMENT OF CORPORATION COUNSEL
CITY AND COUNTY OF HONOLULU
530 S. King Street, Room 110
Honolulu, HI 96813

Electronically Transmitted

Counsel for the CITY AND COUNTY OF HONOLULU

LINCOLN S.T. ASHIDA, ESQ.
WILLIAM V. BRILHANTE, JR., ESQ.
MICHAEL J. UDOVIC
DEPARTMENT OF THE CORPORATION COUNSEL
COUNTY OF HAWAII
101 Aupuni Street, Suite 325
Hilo, HI 96720

Electronically Transmitted

Counsel for the COUNTY OF HAWAII

HENRY Q. CURTIS
KAT BRADY
LIFE OF THE LAND
76 North King Street, Suite 203
Honolulu, HI 96817

Electronically Transmitted

CARL FREEDMAN
HAIKU DESIGN & ANALYSIS
4324 Hana Highway
Haiku, HI 96708

Electronically Transmitted

WARREN S. BOLLMEIER II
PRESIDENT
HAWAII RENEWABLE ENERGY ALLIANCE
46-040 Konane Place, # 3816
Kaneohe, HI 96744

Electronically Transmitted

DOUGLAS A. CODIGA, ESQ.
SCHLACK ITO LOCKWOOD PIPER & ELKIND

Electronically Transmitted

Topa Financial Center
745 Fort Street, Suite 1500
Honolulu, HI 96813

Counsel for BLUE PLANET FOUNDATION

MARK DUDA
PRESIDENT
HAWAII SOLAR ENERGY ASSOCIATION
P.O. Box 37070
Honolulu, HI 96837

Electronically Transmitted

ISAAC H. MORIWAKE, ESQ.
DAVID L. HENKIN, ESQ.
EARTHJUSTICE
223 South King Street, Suite 400
Honolulu, HI 96813-4501

Electronically Transmitted

Counsel for HAWAII SOLAR ENERGY ASSOCIATION

RILEY SAITO
THE SOLAR ALLIANCE
73-1294 Awakea Street
Kailua-Kona, HI 96740

Electronically Transmitted

JOEL K. MATSUNAGA
HAWAII BIOENERGY, LLC
737 Bishop Street, Suite 1860
Pacific Guardian Center, Mauka Tower
Honolulu, HI 96813

Electronically Transmitted

CAROLINE BELSOM
MAUI LAND & PINEAPPLE COMPANY, INC.
P.O. Box 187
Kahului, HI 96733-6687

Electronically Transmitted

KENT D. MORIHARA, ESQ.
KRIS N. NAKAGAWA, ESQ.
SANDRA L. WILHILDE, ESQ.
MORIHARA LAU & FONG LLP
841 Bishop Street, Suite 400
Honolulu, HI 96813

Electronically Transmitted

Counsel for HAWAII BIOENERGY, LLC and
MAUI LAND & PINEAPPLE COMPANY, INC.
THEODORE E. ROBERTS
SEMPRA GENERATION

Electronically Transmitted

101 Ash Street, HQ 10
San Diego, CA 92101-3017

JOHN N. REI
SOPOGY, INC.
2660 Waiwai Loop
Honolulu, HI 96819

Electronically Transmitted

GERALD A. SUMIDA, ESQ.
TIM LUI-KWAN, ESQ.
NATHAN C. NELSON, ESQ.
CARLSMITH BALL LLP
ASB Tower, Suite 2200
1001 Bishop Street
Honolulu, HI 96813

Electronically Transmitted

Counsel for HAWAII HOLDINGS, LLC, dba FIRST
WIND HAWAII

CHRIS MENTZEL
CHIEF EXECUTIVE OFFICER
CLEAN ENERGY MAUI LLC
619 Kupulau Drive
Kihei, HI 96753

Electronically Transmitted

HARLAN Y. KIMURA, ESQ.
Central Pacific Plaza
220 South King Street, Suite 1660
Honolulu, HI 96813

Electronically Transmitted

Counsel for TAWHIRI POWER LLC

SANDRA-ANN Y.H. WONG, ESQ.
ATTORNEY AT LAW, A LAW CORPORATION
1050 Bishop Street #514
Honolulu, HI 96813

Electronically Transmitted

Counsel for ALEXANDER & BALDWIN, INC., through
its division, HAWAIIAN COMMERCIAL & SUGAR
COMPANY

DATED: Honolulu, Hawaii, March 15, 2010


ERIK KVAM